



CONSTRUCTION EQUIPMENT

SW-28841-2 CMC ROCK VOLVO L220H 3376 - DIESEL ENGINE



Sample No: VCP436518
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-28841-2 CMC ROCK



SAMPLE INFORMATION

Sample Number	VCP436518	VCP434554	VCP404710	VCP406787
Sample Date	24 Jan 2024	25 Sep 2023	17 Jul 2023	26 Apr 2023
Machine Hours	3557	3016	2160	1547
Oil Hours	540	1000	500	1100
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	ATTENTION	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.0	12.9	12.4	11.7
Base Number (BN)	mg KOH/g	7.4	7.9	7.9	4.3
Oxidation (PA)	%	58	64	62	67



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.3	0.3	0.2
Nitration (PA)	%	65	65	58	71
Sulfation (PA)	%	52	56	55	54
Glycol	%	NEG	NEG	NEG	0.0
Fuel	%	<1.0	<1.0	<1.0	0.4
Silicon	ppm	5	6	0	9
Sodium	ppm	3	4	<1	3
Potassium	ppm	3	0	1	0



WEAR METALS

Iron	ppm	4	15	12	15
Copper	ppm	6	9	31	67
Lead	ppm	1	<1	<1	0
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	3	27	<1	<1
Chromium	ppm	0	<1	0	0
Molybdenum	ppm	62	60	59	52
Nickel	ppm	<1	<1	0	0
Titanium	ppm	<1	3	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	2
Vanadium	ppm	<1	<1	0	<1



ADDITIVES

Calcium	ppm	1294	1119	1145	1371
Magnesium	ppm	671	973	843	679
Zinc	ppm	1244	1262	1166	1096
Phosphorus	ppm	1049	1006	953	789
Barium	ppm	0	0	2	0
Boron	ppm	19	2	3	10

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: VOLVO8770
Unique No: 10857583
Signed: Wes Davis
Report Date: 01 Feb 2024



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GRAPHS

